

# City of Asheville Water Resources Department

January 23, 2012



### Vision:

 Provide the highest quality drinking water to our customers while managing the water fund in the most economical and fiscally responsible manner possible.

### • Mission:

The Water Resources Department will be the innovative leader in the water industry. Using the concept of continuous improvement, we accept the challenge of providing our regional customers with water to enhance their quality of life; being stewards over the most vital of all natural resources; and empowering our employees to meet our customer needs by providing the finest drinking water in the United States in an efficient and cost effective manner.



# **Presentation Participants**

- Esther Manheimer
- Jan Davis
- Gary Jackson
- Bob Oast
- Stephen Shoaf

- Vice Mayor, City Council
- City Council
- City Manager
- City Attorney
- Director of Water Resources

# 1. Opening Comments/Introduction





### Introduction



This presentation will provide an overview of the Water Resources Department, including information about the following:

- City of Asheville / Water Overview
- History of Water System
- Water System Information
  - Customer Base,
  - Operations,
  - Financial Condition, and
  - Administrative Direction of the Department.

# City Highlights

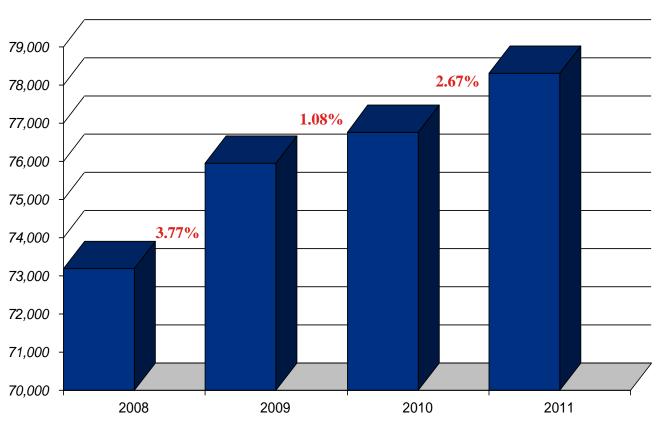


- City of Asheville, North Carolina
  - Current General Obligation Ratings by Moody's Investor Service and Standard & Poors of "Aa3" / "AA"
- City is the center for government, educational, commercial, financial, medical, recreational, and entertainment activities in Western North Carolina
- Travel and tourism industry produced an economic impact of \$729.02 million in 2010
- Balanced Economy: Health Care, Travel & Tourism, Regional Trade, and Manufacturing, Retirement / Second Home
  - Leading Employers: Education, Local Government, Mission Health System & Hospital, The Biltmore Company, Grove Park Inn, & Ingles Markets
- Colleges & Universities: UNC-Asheville, Asheville-Buncombe Technical Community College, and Western Carolina University

# City of Asheville Population



City of Asheville's average population growth rate is 2.51% from 2008 to 2011



Year	Population	
2008	73,189	
2009	75,948	
2010	76,764	
2011	78,813	

Source: City of Asheville Budget Books.

### **Economic Overview**



In 2006 the City of Asheville had the highest per capita retail sales of any City in North Carolina\*

Asheville is a consistent leader in per capita retail sales for cities in North Carolina

Gross median income for Asheville citizens was \$41,722 in 2010. This is below the State median income.

Asheville is the hub of the Asheville Metropolitan Statistical Area and the economic engine of Western North Carolina

Source: North Carolina Department of Revenue, Sales and Use Tax Division, Fiscal Year 2006

# An Organization with National Recognition



**All American City**: 1951, 1969, 1997

The Asheville Police Department is a nationally accredited organization.

**Gold Medal Parks Department** (2002): Asheville Parks, Recreation & Cultural Arts Department is the first Nationally Accredited Municipal Parks & Recreation Department.

Preserve America White House designation (2006).

The City, Housing Consortium and Homeward Bound were presented with one of only 12 national **HUD "Doorknocker" Awards**, celebrating best practices in the federal HOME program (2011).

The Downtown Master Plan and the Sustainability Plan both received awards from the North Carolina Chapter of the **American Planning Association** (2010).

Government Managed Information Systems Best Practices Award, 2011

**Environmental Systems Research Institute** Special Achievement in Geographic Information Systems, 2011

# Governance: Council/Manager Form of Government



### **Population**

Estimated MSA\* Population of 417,012 as of 2010

### **City Council**

- Comprised of Mayor and six Council Members
  - Elected for 4-year, staggered terms
  - Elected at large
- Mayor serves as ceremonial head

### **City Council has the power to:**

Policy Adoption
Budget Tax Rate
Issue Debt
Appoint City Manger, Attorney and Clerk

### **City Manager**

C.E.O.

Hire and supervise directors
Recommend annual budget to City Council
Prepares issues/policies that will be
presented to City Council for action



\*The Asheville MSA consists of Buncombe, Haywood, Henderson, and Madison counties

# Financial Recognition



**Government Finance Officers Association** Distinguished Budget Presentation Award (22 years)

Government Finance Officers Association Certificate of Achievement for Excellence in Financial Reporting (31 years)

### **Bond Rating:**

- General Obligation Bonds: Moody's Aa1, Standard & Poor's AA+
- Revenue Bonds: Moody's Aa2, Standard & Poor's AA

"The stable outlook reflects the expectation that the town will remain its strong financial position, which is anchored by above-average reserves and good debt management."

Standard & Poors Credit Profile (2010)

# **Innovative Projects**



### The Asheville Project

the program officially kicked off with 47 diabetic patients and has grown to well over 350 patients covering diabetes, asthma, high blood pressure, high cholesterol and/or depression.

### **Development Services Center "One Stop Shop"**

Nearly every permit issued by the City is available in one convenient location. Citizen feedback has been overwhelmingly positive.

### **Energy Management Cost Savings**

A four year program to change all streetlights to LED lights that will save \$650,000 annually and reduce carbon emissions that are equal to planting 60,000 trees.

### **Automated Garbage Collection**

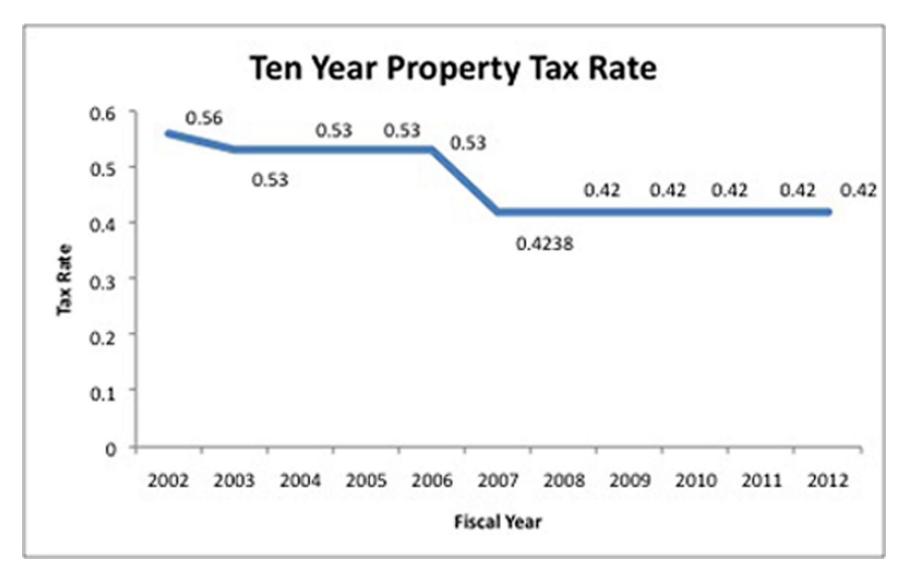
The special lifting mechanism reduces employee injuries and makes trash collection more efficient.

### **Automated Meter Reading**

This state-of-the-art system will allow Meter Readers to capture drive-by meter readings and automatically collect consumption, diagnostic, and status data from water meters and use that data for billing, troubleshooting, and analyzing.

# Financial Responsibility: Tax Rate

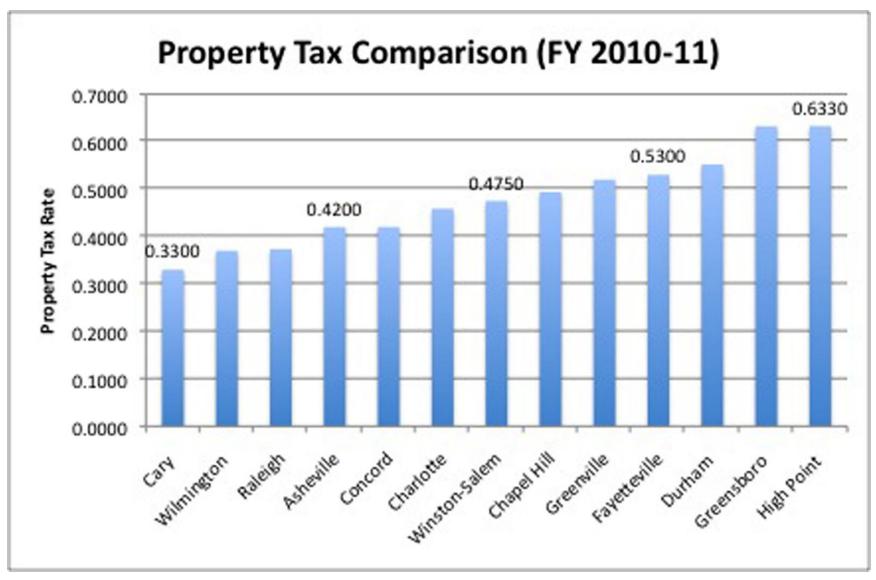




\*Reevaluation Years: 2003, 2007

# Financial Responsibility: Property Tax Rates in NC





Last Property Tax Increase in Asheville: \_\_\_\_\_

### How We've Addressed the Great Recession



Automated Garbage Collection

Preventative Health Care Programs

Fleet/Fuel Conversions

**Energy Management Cost Savings** 

(LEED Lighting)

Collaborative Service Delivery

Responsible Health Benefits

Overtime Adjustments

Work Hour Efficiencies

Volunteerism

Retirement Incentives

IT Remedies

Modification of Budget Process

Focus on Core Services

Improvements in Work Rules/Policies

Intergovernmental Collaboration

Sustainable Employee Benefits

Revised Staffing Protocol/Targets

**Purchasing Restrictions** 

**Energy and Water-Saving Strategies** 

**Delay in Capital Improvements** 

Cancellation of Non-Core Services

Departmental Budget Cuts

"Contracting In"

**Contracting Out** 

Hiring Freeze

Memberships in Professional

**Organizations** 

**Travel Restrictions** 

Position Re-engineering

**Review of Training Expenses** 

Four-Day Workweek

Re-evaluatived Agency Support

### Regional Leadership and Service: Retirement of Depression Debts



1920's: Both the City and County experienced tremendous growth and development.

1929: The City and County had together incurred approximately \$56 million in bonded debt to pay for things such as the County Courthouse, City Hall, Beaucatcher Tunnel, schools, parks and City water system.

Early 1930's: When Asheville and Buncombe County defaulted on their bonded indebtedness, the debt, including water debt, was refinanced through refunding bonds issued on July 1, 1936. The program was administered by the state.

The water portion of the consolidated refunding bonds totaled \$5.6M with a 40 year maturity to provide for smaller, more manageable principal payments. The bonds were fully paid in 1976.

Since 1976, all indebtedness incurred in connection with the Asheville water system has been debt issued by, in the name of, the City of Asheville, and no other entity.

# Regional Leadership and Service



### **US Cellular Center**

250,000 tickets sold annually

72% of ticket sales outside Buncombe County (2008)

Total budget: \$2,100,000

City General Fund support: \$700,000

Hosting the 2012 – 2014 Southern Conference Tournaments

### **Transit Funding**

• Of the \$4M the City receives, roughly \$500,000 is distributed to Henderson County.

### Water system

•Provides dependable, safe supply for 53,158 customers (20,625 are non-city and non-ETJ)

# Regional Leadership Services



### **Parks and Recreation Facilities**

- WNC Nature Center: 98,000 visitors in 2010 (75% were non-city residents)
- McCormick Field: 163,000 visitors in 2010 (51% were non-county residents)
- Ashton Park Tennis Courts: 7,300 visitors in 2010 (65% were non-city residents)
- Municipal Golf Course: 35,000 rounds of golf in 2010 (40% were non-city residents)



# Regional Leadership and Service



### **Historic Preservation**

The City manages the Historic Resources program for Asheville/Buncombe County

### **City/County Ten Year Plan to End Homelessness**

Long range, comprehensive plan coordinated by the City's Community Development Division.

### **Home Consortium**

Asheville is the leader of the regional (four county) consortium that oversees our regional Home Funding distribution.

One of 20 national DOT TIGER II grantees supporting sustainable development planning for its East of the Riverway Sustainable Neighborhood program (2010).

The City and its housing partners are regularly recognized by the North Carolina Housing Finance Agency for excellence in housing development.

### How Others See Us



Ranked 6th among all US cities as a place to do business, Forbes.com, July 2010

Voted #1 of Top 25 Small-Cities American Style, May 2010

Top Ten Best Place to Smooch, Pet Cities, Film Festivals, Foodie Cities and Golf Cities, Livibility.com, 2012

Ranked #21 of Forbes 200 Best Places for Business and Careers Forbes, April 2010

Included as one of 10 Best Places for Second Homes Barron's, March 2010

Included as a Favorite City for Business Trips USA Today Road Warriors, August 2009

Ranked #8 of Top 10 Metro Areas for Quality of Life Business Facilities Magazine, July 2009

Ranked #2 as Nation's Top Arts Destinations AmericanStyle Magazine

Ranked #6 Best Metro Places for Business & Careers Forbes.com, March 2009

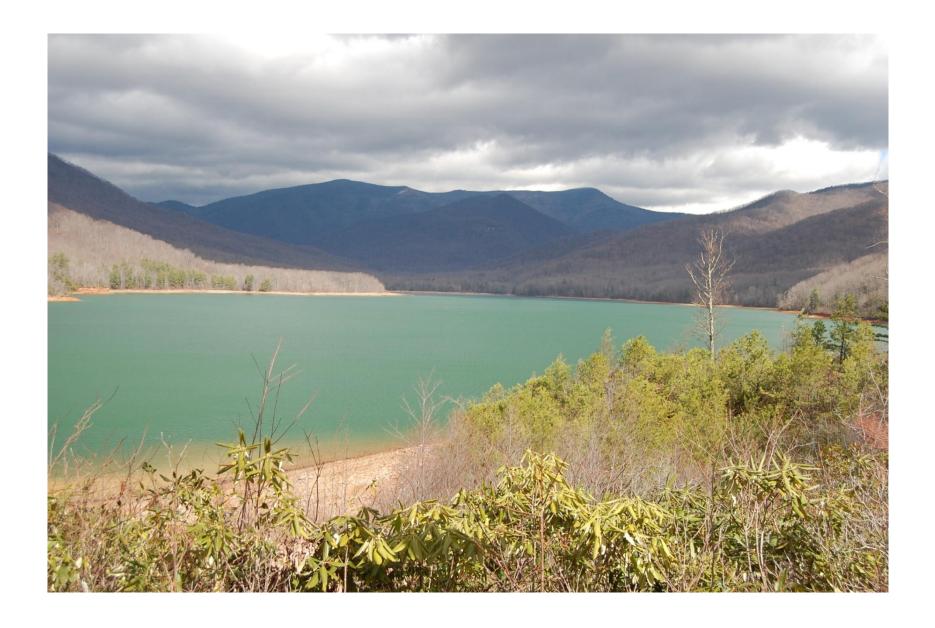
# Asheville Water System at a Glance



- 20,000 acres of protected watershed in Buncombe County
- Two reservoirs holding roughly 7 billion gallons of stored water
- Two water treatment facilities treating water from those reservoirs
- One "run of river" water treatment facility located along the Mills River in Henderson County
- Permitted treatment capacity of 43.7 million gallons per day
- Average daily demand of about 21 million gallons per day
- System Service Area 183 square miles
- 1661 miles of water lines

# 2. Historical Review - Timeline







- In 1883 the City of Asheville began developing a municipal water system by collecting spring water into pipes running into the center of town.
- Between 1900 and 1902 bonds were issued to construct a filtration system and two 16 inch water lines using the Swannanoa River.
- In1903 Asheville began pulling water out of the Swannanoa River.
- About 1910 the City added another intake on the Swannanoa River but periodic low flows caused water shortages.
- In 1915 the City issued a \$50,000 Water bond for the "purpose of purchasing additional lands and water courses in order to enlarge and extend the City's Watershed".
- In 1916 the City purchased property at the headwaters of Bee Tree Creek.
- By 1921 the Bee Tree intake was completed along with storage on Beaucatcher Mountain and the new water supply was put on line.



- In 1922 there was a \$65,000 bond issued by City Council "to supplement and increase the present water supply system of the city".
- In 1923 City Council authorized issuance of a \$175,000 water bond.
- Construction of a reservoir on Bee Tree Creek began in 1924. This
  reservoir was completed in 1927. This project included a 24 inch
  waterline to Asheville and related distribution pipes.
- Also by 1927 the City of Asheville had purchased 20,000 acres of watershed feeding the North Fork and Bee Tree creeks.
- Sullivan Act (I) was passed by the NC Legislature in 1933
- Severe drought in 1950 prompted the decision to begin construction of the North Fork Reservoir
- The North Fork Reservoir was put on line in 1955 and became the primary water source for Asheville

### 1963 to 1994



- The Bee Tree reservoir becomes the backup supply and is converted to a recreational facility in 1963.
- Upgrades and improvements to the treatment process at North Fork were necessary to correct water quality issues. The North Fork Direct Filtration Treatment Plant was completed in 1977. Cost: \$5,700,000
- Asheville and Buncombe County enter into the "Water Agreement" in 1981
- In 1983 recreation was eliminated and the Bee Tree reservoir was returned to use as a water supply.
- A modern water treatment facility was completed and put on line in 1987 pulling from the Bee Tree Reservoir. Cost: \$2,200,000
- In 1991 a bond referendum (\$23 million) was passed by residents of Asheville to increase capacity and make repairs and improvements.
- In 1994 the Mills River was selected as a site for an additional treatment facility and the purchase of property began.

### 1995 to 2007



- Henderson County joins the "Water Agreement" in 1995 by signing the Regional Water Supply Agreement.
- In 1999 the Mills River Water Treatment Plant was dedicated and went into production. Cost approximately \$31 million
- In 2004 Brown and Caldwell Consulting Engineers begins a comprehensive study of the water system. Their findings are that the system has deteriorated both physically and financially.
- In 2005 the City of Asheville dissolves the Asheville/Buncombe Water Agreement and signs an agreement for Water System Maintenance and repair.
- Also in 2005, Sullivan Act II and III are passed by the NC Legislature
- In 2006 Brown and Caldwell Consulting Engineers develops a list of needed capital projects for the water system.
- In 2007 Asheville City Council approves a Capital Improvement Fee (CIP fee) to fund capital projects needed to maintain the water system.

### 2007 to Present



- In 2007 the Asheville City Council approves the issuance of a \$40 million Water Infrastructure Improvement Bond.
- In 2009 the Asheville City Council adopts a Water System Master Plan prepared by consultants with Jordan, Jones, and Goulding Engineers.
- From 2009 2010 improvements were completed to both the North Fork and William DeBruhl water treatment plants.
- By 2010 all system improvements funded by the 2007 water bond issue have been completed.
- A water rate and fees study was performed by Raftelis Financial Consulting in 2010, producing a rate model for future rate determinations.



### Sullivan Act - 1933



- As Asheville developed a water system, water districts were developed outside the City and were connected to the City of Asheville water lines.
- Bonds were issued to finance these districts, backed by the taxing authority of Buncombe County.
- The 1933 Sullivan Act was passed mandating that connections to the district water lines would pay the same rates as customers inside the City. Up until that point the City had pursued differential rates.
- In 1936 the City issued refunding bonds administered by the Sinking Fund Commission to pay the defaulted consolidated debt of the water system and the County districts resulting from the Great Depression.
- In 1955 the City of Asheville passed an ordinance charging differential rates to outside customers. This was declared invalid based on the NC Supreme Court review of Candler v. City of Asheville (1958).
- By 1960 the City had annexed portions of the original districts and assumed a share of the outstanding bond indebtedness, as well as costs for maintenance and expansions.
- The refunding debt for defaults during the Great Depression was paid off in 1976.

# Asheville / Buncombe Water Authority



- An interlocal agreement established the Asheville/Buncombe Water Authority in 1981.
- There were several amendments (1987, 1994, 1996) to the original agreement and the body of agreements became known as the "Water Agreement".
   Henderson County and Cane Creek W&S District joined the agreement in 1994 – 1996.
- Asheville agreed to drop its challenge of the Sullivan Act while the Water Agreement is in force.
- The agreement included provisions for Parks and Recreation, Law Enforcement,
   Civic Center, Board of Tax Supervision, and other agencies as well as water.
- Asheville complied with the provisions of Sullivan Act prior to and throughout the life of the Asheville/Buncombe Water Authority Agreement.
- Asheville and Buncombe properties were conveyed to meet the terms of the agreement at the start of the Water Agreement and then re-conveyed when the agreement was terminated in 2005.

# Asheville / Buncombe / Henderson Regional Water Supply Agreement



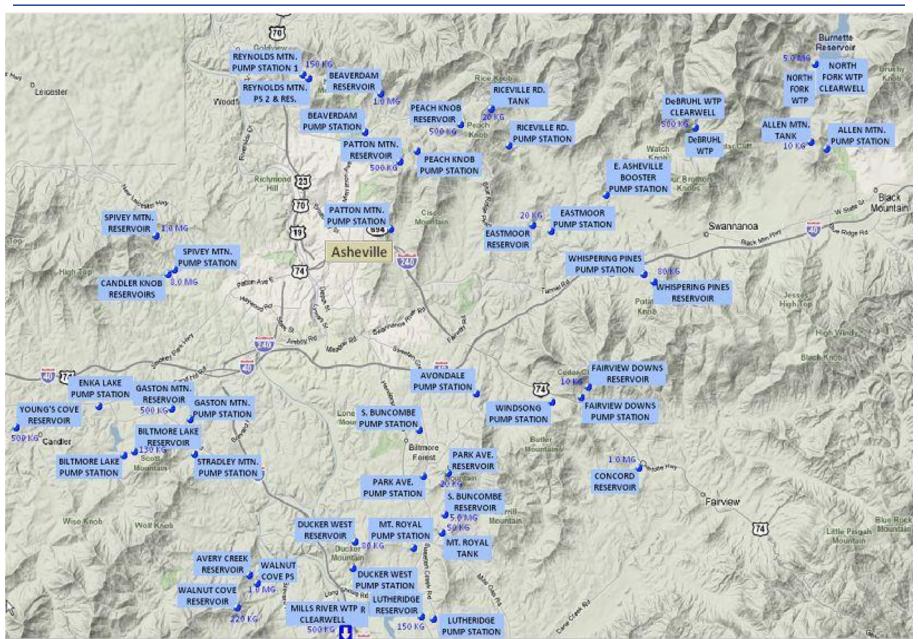
- In 1995 Henderson County and the Cane Creek W&S District joined Asheville and Buncombe in a Regional Water Supply Agreement.
- Many of the provisions of the A/B Water Agreement applied to the new agreement.
- This cleared the way for acquisition of property and construction of the Mills River water treatment plant
- Henderson County was allowed two seats on the Water Authority.
- The parent agreement remained the Asheville / Buncombe Water Authority Agreement ("Water Agreement") until it was dissolved in 2005

# 4. Asheville Water System



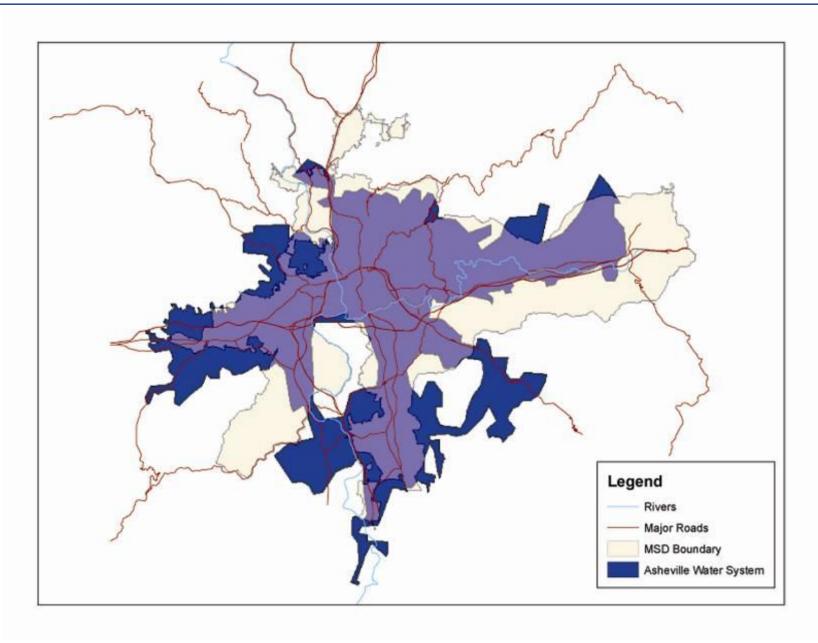
# City of Asheville





# City of Asheville: Service Areas





# City of Asheville



### Top 10 Customers

 The Water Systems largest customers consists of industrial, tourist, government, and healthcare customers.

Type of Business

Mission Hospitals Hospital

Buncombe County Schools County Schools

Woodfin Water District Municipal Government

City of Asheville Municipal Government

Grove Park Inn Resort

UNC – Asheville University

Town of Biltmore Forest Municipal Government

Ingles Markets Grocery Store Chain

Milkco, Inc. Food Processing

Buncombe County County Government

# Water Account Composition – December 2011



2011	December
Water Active	53158
Sewer Active	38299

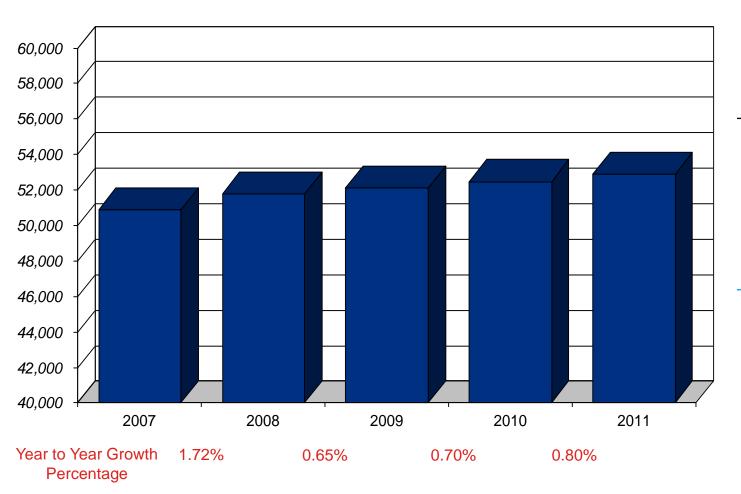
Inside C.O.A.	29750
In ETJ	2747
Not City or ETJ	20625
Unknown	36
	53158

Church	СН	319
Commercial Light	CL*	50
Commercial Heavy	CM *	3493
Government	GV	110
Hardship	HD	100
Hospital	HS	70
Irrigation	IR	466
Medical	MC	2
Multi Family Residential	RM	1562
Single Family Residential	RS	46841
School	sc	139
Wholesale	WH	6
		53158

## Water System Customers



City of Asheville's average annual customer growth was <1% from 2007 to 2011



Year	Customers
2007	50,903
2008	51,776
2009	52,110
2010	52,477
2011	52,896

# Water System



- The Water System covers the entire City of Asheville; ~27% of Buncombe County outside the City; and ~2% of Henderson County
- 183 total square miles in the water system service area that consist of:
  - 3 Water Treatment Plants:
    - North Fork, Black Mountain
    - William DeBruhl, Swannanoa
    - Mills River, Horseshoe
  - –40 Pump Stations
  - –32 Storage Tanks
  - -1,661 Miles of Water Lines
  - -56,000 Water Meters (53,000+ active)
  - -6,650 Flushing Hydrants

## Water System (cont.)



- The department has 7 Divisions with a total of 146 employees:
  - Administration 7 employees
  - Customer Service 22 employees
  - Engineering 8 employees
  - Maintenance 50 employees
  - Meter Services 18 employees
  - Production 41 employees

# City of Asheville / Water Resources Relationship



- Water Resources is an Enterprise activity within the City of Asheville
- Water Resources pays indirect costs for support functions such as Human Resources, Finance, Legal, Information Technology, and General Administration. Payments are made to the City General Fund.
- Water Resources pays direct costs for paving of street cuts and fleet maintenance (provided by the Public Works department).
- Under the Sullivan Act Amendment (2009) Water Resources pays up to 5% of revenues to the General Fund for repairs and upgrades associated with Water Resources projects.\*

### Water Resources / MSD Relationship



- Asheville and MSD cooperate on major capital projects when feasible. Both organizations share Capital Improvement Plans and look for commonalities between the plans to minimize disruption to neighborhoods.
- Using a "fix it once" approach, capital improvement project lists are shared and both organizations can make necessary repairs or replacements prior to paving.
- Asheville provides Customer Service and Billing services to MSD at a negotiated fee. This is a consolidated service to improve efficiency.

### Water System (cont.)



- In 2011, Brown and Caldwell, estimated the replacement cost of water system assets at \$1.3 billion:
  - Pipes = \$876 million
  - Watersheds = \$170 million
  - Treatment Plants = \$135 million
  - Meters = \$64 million
  - Pump Stations = \$26 million
  - Flushing Hydrants = \$22 million
  - Vehicles / Equipment = \$7 million
- Buncombe County currently lists land values of Asheville Watersheds at \$719 million:
  - North Fork = \$677 million
  - William DeBruhl = \$35 million
  - Mills River = \$7 million

\*In response to Representative Moffitt's inquiry, the City of Asheville owns the assets of the water system with the exception of one tank and pump station and a few waterlines. In 2005 the City signed an agreement to maintain all assets, and the County agreed to reimburse for maintenance costs of their assets.

## Water System (cont.)



- 1st water utility in NC to become ISO 14001 Registered to Environmental Performance Standards
- Dedicate \$6.5+ million annually to Capital Improvement needs
- Completed a Water System Master Plan Update in 2009 with firm Jordan, Jones & Goulding
- Updated the Water Rate Model in FY2011 with Raftelis Financial Consultants
- Preparing to update the Asset Management Plan to determine replacement and refurbishment needs
- Replacing all system water meters with "smart meter" AMR remote read technology
- Emphasizing green technologies where appropriate

### Water Demand



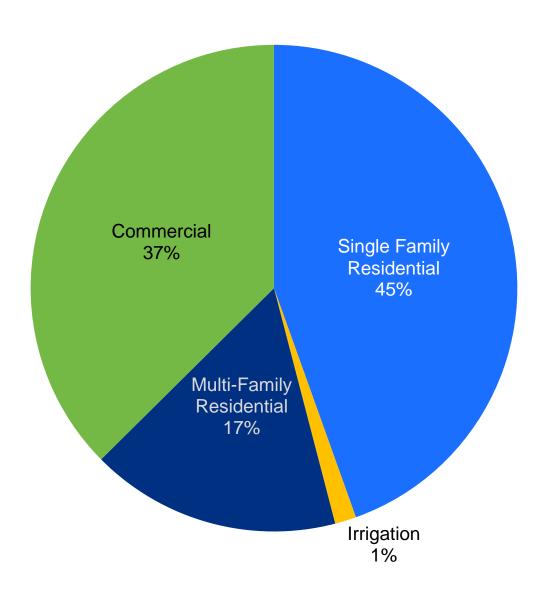
	2008	2009	2010	2011
Residential – Single-Family				
Total # of Accounts	45,706	45,968	46,329	46,683
Total # of Bills	267,134	276,263	280,518	282,423
Annual Usage Volume (CCF)	2,844,103	2,796,210	2,663,582	2,699,304
Residential – Multi-Family				
Total # of Accounts	1,546	1,568	1,576	1,580
Total # of Bills	9,249	10,069	10,262	10,242
Annual Usage Volume (CCF)	999,955	990,837	987,162	983,663
Non-Residential				
Total # of Accounts	4,524	4,573	4,573	4,633
Total # of Bills	26,111	28,089	28,437	28,572
Annual Usage Volume (CCF)	2,832,160	2,590,537	2,479,587	2,669,466

**Customer Profile:** 

Number of Customers: Residential Customers – 91% Non-Residential Customers – 9% Customers by Usage: Residential Customers – 58% Non-Residential Customers – 42%

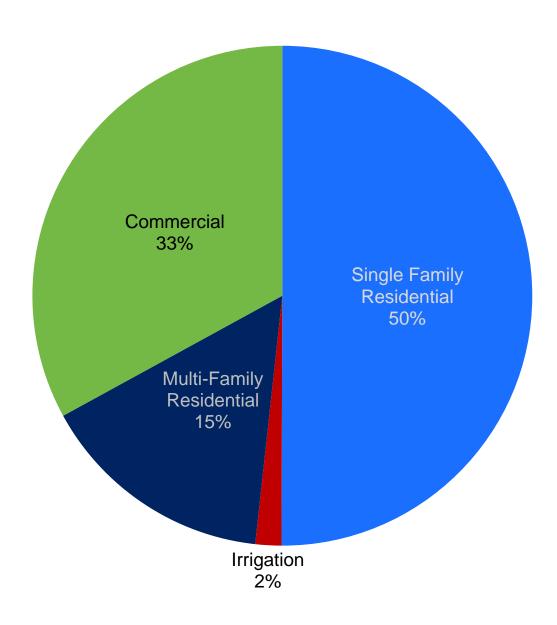
# Percentage of Water Usage by Rate Class FY '11





# Percentage of Revenue by Rate Class FY '11

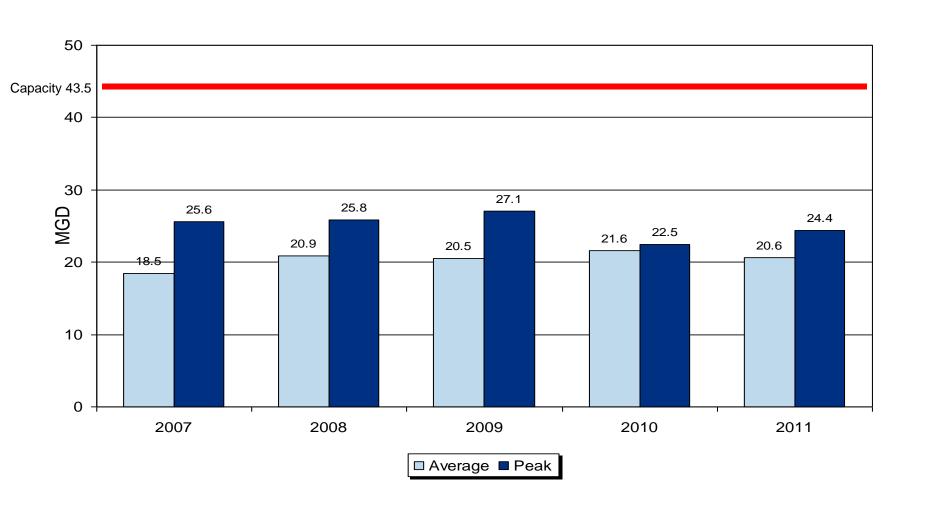




# Water Consumption: Usage and Demand



#### Average Usage and Peak Demand



# 5. Compliance with Environmental Laws and Regulations



### Compliance with Environmental Laws and Regulations



The City of Asheville completes many reports, surveys, plans, and inspections / audits on a regular basis to ensure compliance with Local, State, and Federal Regulations:

- Monthly Operations Reports (MORs) to NCDENR
- Annual Water Quality Report
- Local Water Supply Plan (Annual Update)
- Water System Management Plan (Annual Update)
- Water Shortage Response Plan
- EPA Infrastructure Survey (4-year cycle)
- Drought Management Plan
- Flood Management Plan
- Emergency Operations Manual (Annual review)
- School of Government Benchmarking Survey (Annual)
- ISO 14001 Environmental Management System Audits (Quarterly / Annual)

### Compliance with Environmental Laws and Regulations



• First water utility in North Carolina to achieve ISO 14001 certification.

<ul> <li>CERTIFICATION</li> </ul>	NUMBER IN THE
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•	<b>DEPARTMENT</b>
<ul><li>Water Distribution "A"</li></ul>	18
<ul><li>Water Distribution "B"</li></ul>	19
<ul><li>Water Distribution "C"</li></ul>	13
Surface Water Treatment "A"	23
Surface Water Treatment "B"	3
Surface Water Treatment "C"	2
Physical/Chemical Grade 1	5
<ul> <li>Cross Connection</li> </ul>	12
Meter Technician Certificatio	n 14
<ul> <li>Professional Engineer</li> </ul>	3
Wastewater Treatment	2
Wastewater Treatment IV	1
<ul> <li>Land Application Certification</li> </ul>	n 1

# 6. Capital Demands, Debt Policies and Series 2007 Project





### **Bond Indebtedness**



- The City of Asheville has a history of providing funds necessary to develop, expand, and maintain the water system.
- There have been at least 16 Council actions with voter approval to issue bonds backed by the good faith and credit of the City of Asheville.

<del>-</del> ~1890	\$20,000			
<del>-</del> 1915	\$50,000			
<del>-</del> 1922	\$65,000			
<b>-</b> 1923	\$175,000			
<del>-</del> 1951	\$2,750,000			
<del>-</del> 1961	\$4,500,000			
<b>–</b> 1975	Water Bonds	Series A		
<b>-</b> 1976	Water Bonds	Series B		
<del>-</del> 1991	\$26,000,000	"Fix It First"		
<del>-</del> 1994	System Improvement	ent Bonds		
<b>–</b> 1995	System Improvement Bonds			
<del>-</del> 1996	\$33,000,000	Series 1996		
<del>-</del> 2001	\$13,300,000	Series 2001		
<b>-</b> 2007	\$39,142,000	Series 2007		

### Bond Indebtedness (cont.)



- By issuing bonds backed by the City of Asheville, the water system was able to obtain funds at a lower interest rate thus saving money when obtaining the bonds.
- It is clear that the early bonds issued for water system improvements were re-paid by the taxpayers and not solely by the rate payers of the system.
- The City of Asheville has continued to own the water system and its assets, even during the periods covered by the Water Authority. The Water Authority could not legally own property.
- The question of ownership could be discussed thusly:
  - Much like a restaurant, there are owners who in the case of the Asheville water system are the citizens of Asheville. The citizens have pledged their good faith and credit to support the water system.
  - Much like a restaurant, there are customers who in the case of the Asheville water system are the rate payers. The rate payers pay for a service and commodity which has the expenses of operating the system built into the rate.
- For those waterlines dedicated to the City by developers or others, they receive their payment when the property is sold or exchanged and the taxes, fees, and consumption rates are partially paying back the water system and other infrastructure investments over time.

### Series 2007 Revenue Bonds



Par Amount \$39,025,000 – New Money

Sale Date December 4, 2007

First Payment August 1, 2008

Final Maturity August 1, 2032

Amortization Structure Level Debt Service – New Money

#### **Proforma Series 2007 Sources and Uses**

Sources:

 Par Amount
 39,025,000

 Plus Premium
 419,266

 Less Discount
 -302,211

 Total
 39,142,055

Uses:

Construction Project Fund 38,840,830
Cost of Issuance 155,425
Insurance Premium & Surety 145,800

Total\* 39,142,055

<sup>\*</sup>While the 2007 Bond Issue was for \$39.1 million, Water Resources added project funds to total approximately \$41.6 million.

### Series 2007 Revenue Bonds



Project	Actual Cost	Completion Date	
Royal Pines Area - Replacement of 2" and smaller lines with 8" iron pipe; fire hydrants	\$2,206,605	2010	
<b>Hendersonville Road</b> - Replacement of 6" iron line with 24"; fire hydrants	6,552,899	2008	
Clayton Road to Brevard Road - Replace 6" plastic pipe with 24" iron pipe; fire hydrants; new line for Brevard loop system	2,134,615	2009	
Valve Installations - Install new and replace old valves throughtout the system	1,720,853	2009	
Central Business District - New 8-24" lines replacing 100+ year lines; fire hydrants	12,187,997	2010	
Town Mountain/Haw Creek - New water storage tank and pump station	1,575,289	2008	
West Asheville / Wood Avenue - Replace 2" and smaller lines with 8"	2,294,083	2009	
<b>Back-up Power Generators</b> - Pump stations and the Mills River WTP	5,248,848	2010	
Bee Tree Area - New lines and valve upgrades	1,912,051	2009	
Beaucatcher / White Fawn - New lines and valve upgrades	3,508,900	2009	
Fairview Storage Tank of Pump Station	2,328,409	2010	

### Covenants



#### Rate Covenant, Additional Bonds Test

#### Rate Covenant

 City of Asheville must maintain rates to produce enough revenues to maintain a 1.2 debt coverage ratio

#### Additional Bonds Test

- No Series Bonds, other than Completion Bonds and Refunding Bonds that meet other requirements of the Indenture, may be issued unless either:
  - Net revenues exceed the maximum debt service by 120% (Debt service ratio of 1.2)

OR

 Net Revenues for the most recent Fiscal year maintained 1.2 debt service coverage AND Net revenues, as projected by a report of a Financial Consultant, for the first 2 fiscal years following the date of capitalized interest maintain a 1.2 debt service coverage

### Water Capital Improvements Plan



#### Key Capital Financing Strategies/Practices

- Maintain Adequate Operating Fund Balance
- Commit Annual Revenues to Fund Capital Improvement Projects
- Remain Within Debt Capacity
- Maintain and/or Improve Bond Ratings
- Prepare Multi-Year Forecast for Operating and Capital Budgets
- Utilize Water System Master Plan(s), Rate Study, Capital Needs Study, and Asset Management Plans
- Completed 18 of 28 capital projects identified by the 2006 Brown and Caldwell Capital Improvement report.

## Water Capital Improvements Plan

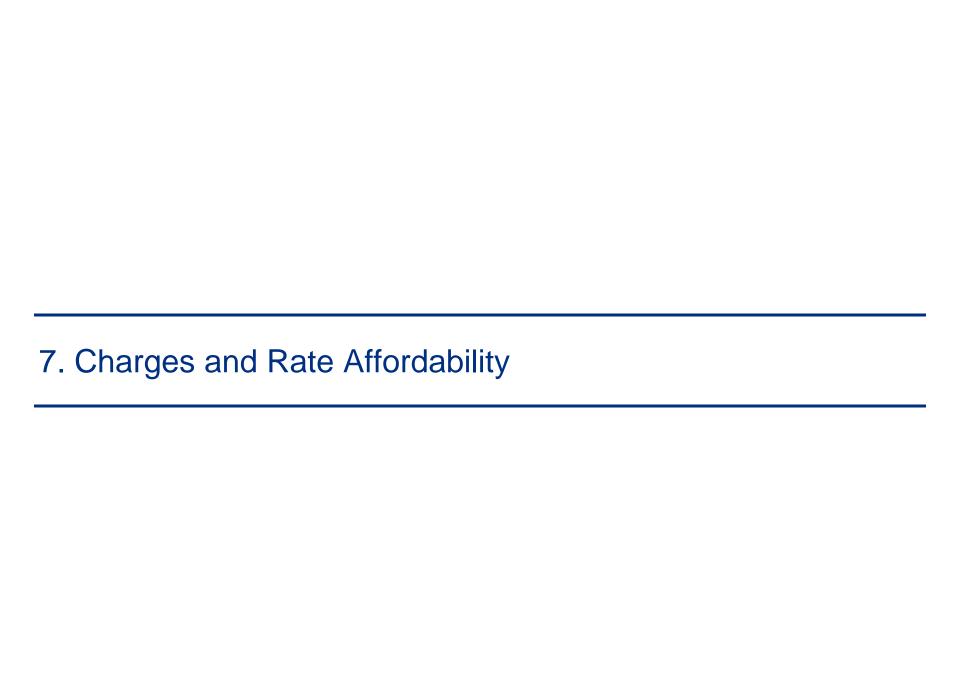


#### 5-Year Forecast of Funding Sources and Projects

	FYE 13	FYE 14	FYE 15	FYE 16	FYE 17	Total
Sources of Funds						
Revenue from the CIP Fee	6,586,504	6,769,988	6,909,993	7,010,815	7,010,815	34,288,115
Debt Service on 2007 Bonds	(\$2,700,000)	(\$2,700,000)	(\$2,700,000)	(\$2,700,000)	(\$2,700,000)	(\$13,500,000)
Supplement from Operating	2,609,146	2,710,012	2,695,007	3,064,924	3,308,435	20,788,115
Total Sources	\$6,495,650	\$6,780,000	\$6,905,000	\$7,375,739	\$7,619,250	\$41,576,230
Use of Funds						
Mandatory NCDOT Projects	\$0	\$0	\$0	\$3,230,739	\$2,519,250	\$5,749,989
Distribution System Projects	3,510,000	3,650,000	4,550,000	2,350,000	1,950,000	16,010,000
Neighborhood Water Line Projects	2,360,650	1,180,000	370,000	650,000	350,000	4,910,650
Water System Master Plan Projects	625,000	1,950,000	1,985,000	1,145,000	2,800,000	8,505,000
Total Uses	\$6,495,650	\$6,780,000	\$6,905,000	\$7,375,739	\$7,619,250	\$78,039,517

<sup>\*</sup> The CIP transfer is equivalent to \$6.4 million annually, less projected debt service on the \$35.0 million revenue bond issue.

The City of Asheville Water Resources Department is required to pay betterment and non-betterment costs for NCDOT projects involving water lines.



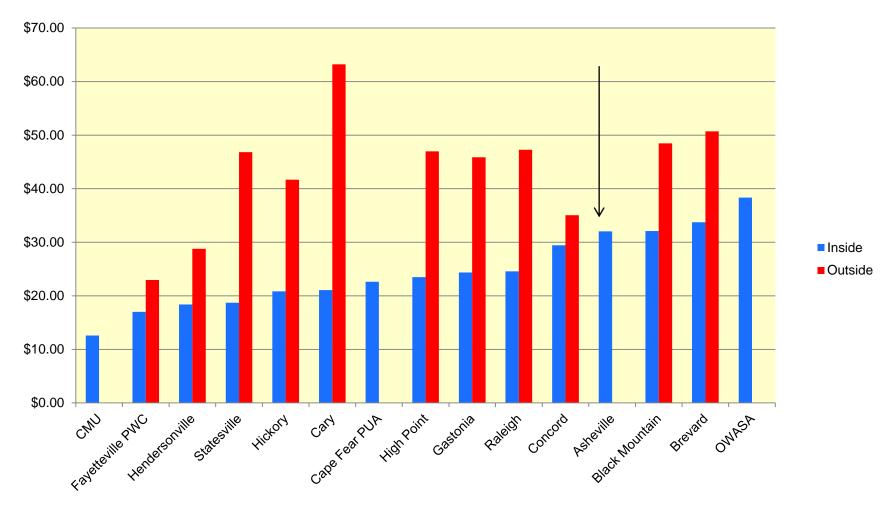
# **Affordability**



- The Water Resources Department has a written policy addressing economic development incentives. These relate to infill and affordable housing projects. 2011: One (1) request of \$22,410
- The Water Resources Department has a written policy addressing Affordable Housing Rebates of water fees at 50% of fees meeting the definitions of affordable housing. 2011: Fifty-two (52) requests totaling \$67,605
- The City's water rates represent between 0.8 and 0.9 percent of the gross monthly income for households earning between \$20,000 and \$40,000. Depending on the definition of "affordable", these rates qualify as affordable water rates.
- Leak adjustments 2011: 2,115 requests totaling \$335,503



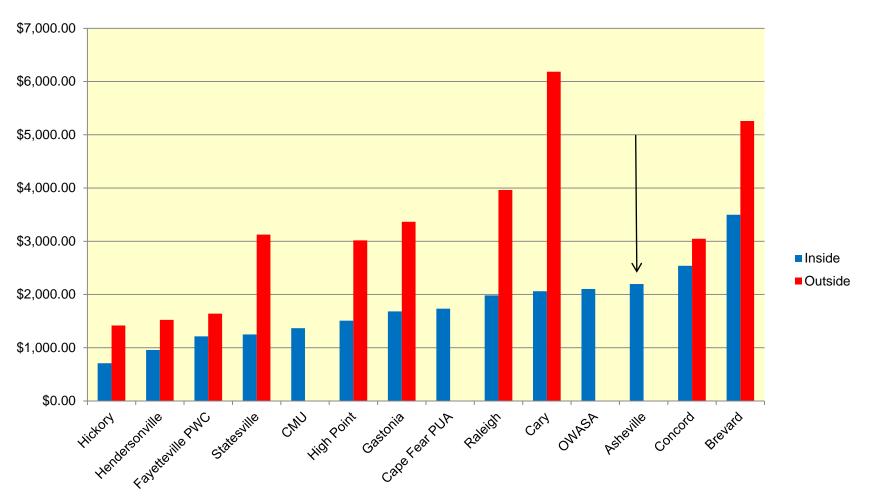
FY 2011 Monthly Residential Water Bills at 5,000 Gallons Consumption



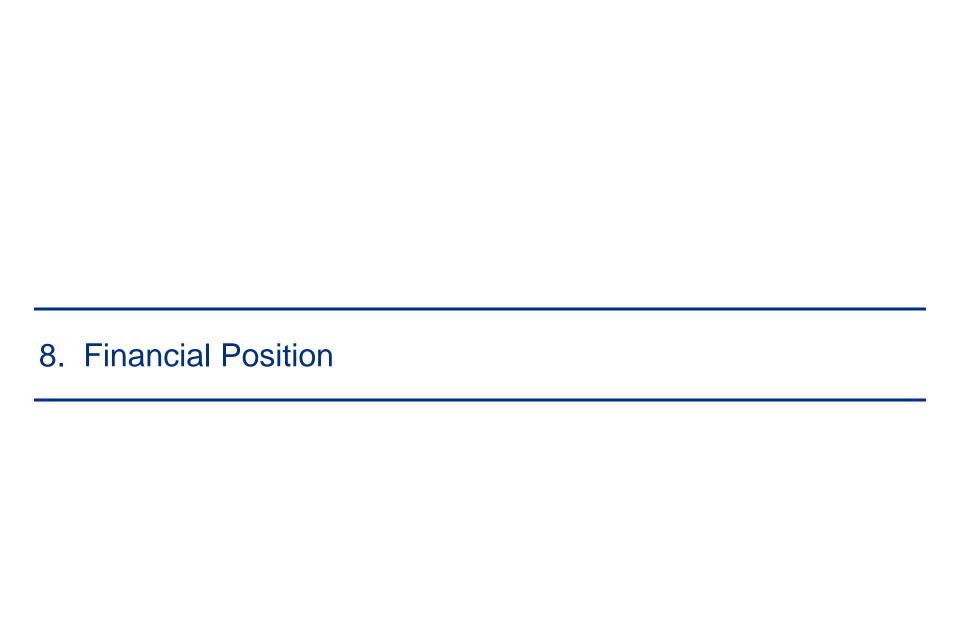
UNC Environmental Finance Center NC Water and Wastewater Rates and Rate Structures



# FY 2011 Monthly Commercial Water Bills 500,000 Gallons Consumption



UNC Environmental Finance Center NC Water and Wastewater Rates and Rate



## Financial Stability



- The City Council adopted a financial policy that the Water Enterprise Fund must have a minimum of 365 days of operating costs in reserve. Currently that measure is at 400+ days.
- The Water Enterprise fund is intended to provide for business continuity and stability of rates if there are unforeseen impacts on the water system.
- Currently, the Water Enterprise Fund holds approximately \$18 million dollars in reserve. This represents a strong cash reserve, but also represents significant leverage for borrowing (debt).

# **Condensed Budget Summary**

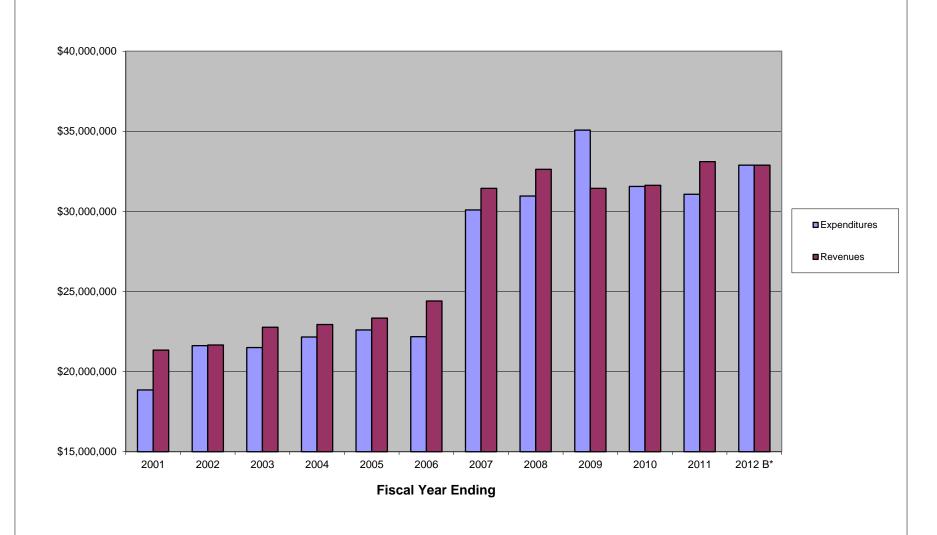


# Asheville Water System (3 Year Budget Summary)

	2009-10	2010-11	2011-12
	Actual	Actual	Adopted
Expenditures:			
Salaries & Wages	5,989,996	5,577,148	6,200,824
Fringe Benefits	2,335,077	2,558,022	2,756,548
Operatings Costs	8,842,944	9,067,318	10,358,403
Debt Service	7,647,970	7,117,083	6,202,580
Capital Outlay	<u>6,861,867</u>	<u>6,748,105</u>	<u>7,371,897</u>
Tatal	04 077 054	04 007 070	00 000 050
Total	31,677,854	31,067,676	32,890,252
FTE Positions	152.00	146.00	146.00
Revenues:			
Charges for Service	31,177,452	32,781,581	32,289,928
Investment Earnings	300,866	142,300	225,000
Miscellaneous	139,696	166,455	16,000
Other Financing Sources	<u>0</u>	<u>0</u>	<u>359,324</u>
Total	31,618,015	33,090,336	32,890,252



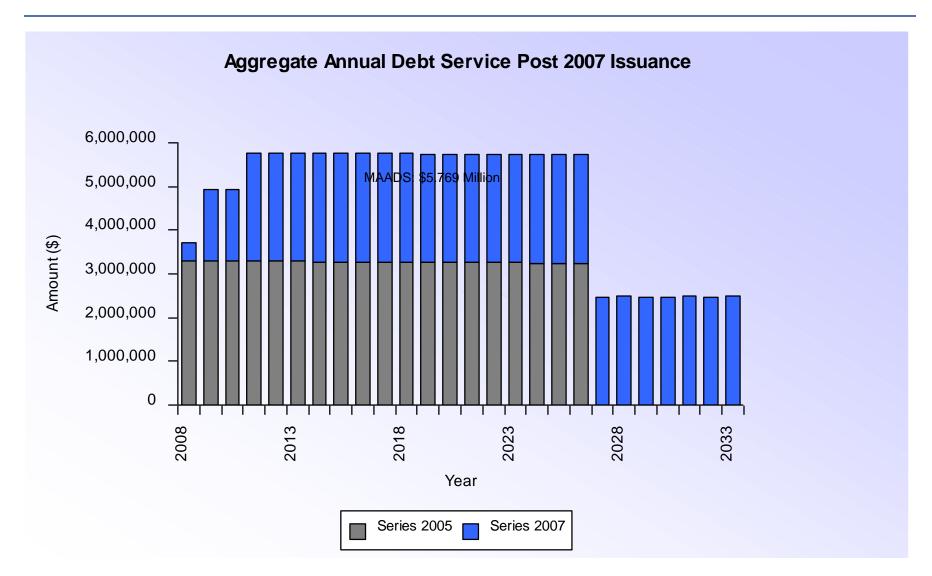
# Water Resources Department Revenues & Expenditures Data from Adopted Annual Budget Book, FY's 2001-2012

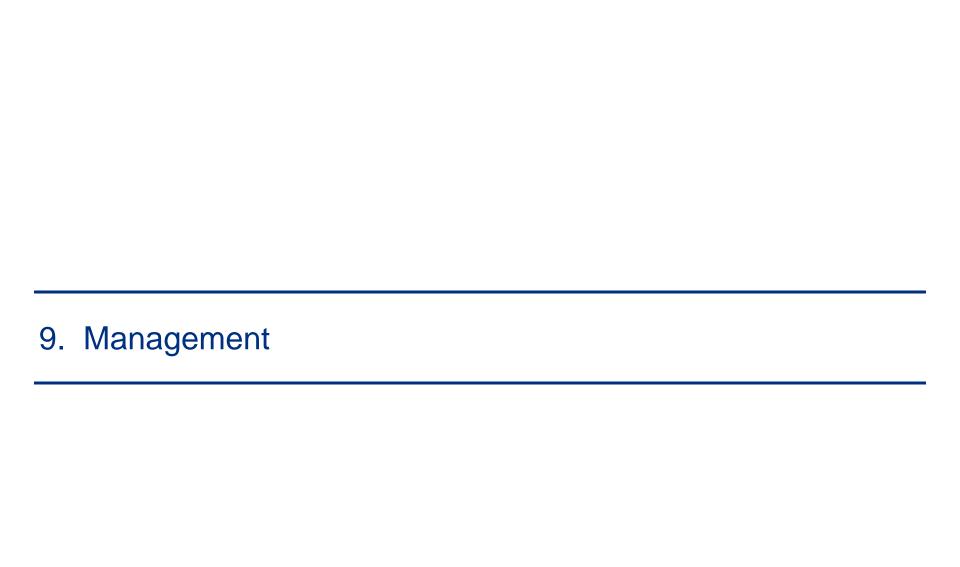


### Aggregate Annual Debt Service Post 2007 Issuance



#### Revenue Bond Debt Only





### Management Personnel – Experienced Team



### Gary Jackson

- Asheville City Manager since June 27, 2005
- Masters of Public Administration
- Former City Manager: City of Forth Worth, TX; Carrollton, TX; Coon Rapids, MN
- City Administrator: Liberty, MO
- Asst. to City Manager and Asst. Budget Director: Dallas, TX

### Lauren Bradley

- Director of Finance and Management Services since June 10, 2011
- Previous positions with the City of Asheville include Administrative Services
   Director and Assistant to the City Manager
- Masters in Project Management

### Stephen Shoaf

- Water Resources Director since May 4, 2009
- Former Director of Utilities City of Burlington, NC
- Masters in Public Health (MSPH 1980) and 31 years of experience in the Water and Wastewater Industry

### City Management



#### Planning and Operations

- Oversight from City Council
- Annual Operating Budget
  - 5 Year General Fund Forecast
- Capital Budget and Capital Improvement Plan
  - Annual Capital Budget
  - 5 Year Capital Plan Beyond the Annual Budget

## City Management (cont.)



### Enterprise Fund for Water Operations

- Department of the City of Asheville
- Utility Fund Forecast (Rate Model) For 5 Years
- Utility Fund capital plans based on: required NCDOT Projects, City Council Initiatives, Brown and Caldwell's 2006 Capital Improvement Plan, JJ&G's 2009 Water Master Plan, and needs prioritized by the Computerized Maintenance Management System

### City Operations Consistently Recognized for Excellence

- Water Resources ISO 14001 Environmental Management System
- Accredited Fire, Police and Parks & Recreation Departments
- Outstanding Planning Award for Open Space and Historic Resources
- GFOA National Recognition for Budget and Comprehensive Financial Reporting

## **Closing Comments**



- Appropriate and experienced management team in place
- Consistent Moderate Growth of Water System Demand
- Excellent Financial Condition
- Consistent investment in water system infrastructure
- Manageable Capital Needs with a Comprehensive Capital Improvement Plan



- Historically, Asheville and Buncombe have had a complex, interwoven relationship that has benefitted and limited the desires of both parties.
- At present, the City of Asheville has established a positive management approach to the water system employing best business practices. Tools and measurements are in place to assure that the water system is managed responsibly and with accountability.
- The City of Asheville and Water Resources Department are dedicated to serving all water customers in an efficient and transparent process.

### Third Party Assessments



"The staff of Asheville's Water Resources Department has been proactive in planning for their future financial needs to pay for capital investment in their system as well as to operate and maintain those assets that are currently in place in order to continue to provide high quality service. Equitable recovery of costs has been a key objective in their proactive financial planning."

Raftelis Financial Consultants

"They stand out for their excellent stewardship of the water resources of the Asheville, Buncombe and Henderson County region. Their industry leading practices include a fully developed asset management program that has resulted in a stable rate structure and high reliability—two factors that are key to economic development of the area."

Rick Carrier, Vice President, Brown and Caldwell

"As I worked with the City of Asheville on a Water System Master Plan, the City's goal was apparent -provide a high level of service to customers, while keeping rates affordable for all. Asheville staff strived with
enthusiasm to meet that goal."

Jacobs Engineering (formerly Jordan, Jones & Goulding), Eric Nease, P.E.

"The Asheville Water Resources Department continues to maintain a highly effective environmental management system under the ISO 14001 International Standard. The recent audit of the system confirms a high level of competence and commitment to environmental excellence throughout the department." Charles Lee, NSF Lead Auditor, following our 2011 ISO 14001 annual audit

"Employees possess high levels of certification and have been recognized for excellence."

"Confidence in the Utility's ability to use resources wisely, to cut costs and provide quality service has gained support within the business and commercial community for funding infrastructure replacement." QualServe Peer Review Team

